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Ivy Villani

St. Catherine University, ivy.villani@outlook.com

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Unmasking the Villain: Predictive Factors and Their Ability to Identify Potential Mass Shooters

by

Ivy Lee Villani, B.S.

MSW Clinical Research Paper

Presented to the Faculty of the
School of Social Work
St. Catherine University and the University of St. Thomas
St. Paul, Minnesota
in Partial fulfillment of the Requirements for the Degree of
Master of Social Work

Committee Members
Lisa Kiesel, MSW, Ph.D., LICSW (Chair)
Lisa Borneman, MSW, LICSW
Jo-Anne Middaugh, MSW, LICSW

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

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Abstract

The purpose of this study is to establish whether professionals believe there is a way to predict large-scale aggressions, not related to gang affiliation, based on identifiable factors. Through the use of a semi-structured interview, 6 professionals gave personal opinions about identifying factors. The professionals each had more than 5 years of direct contact with people ages 15-25, within their individual fields. Common themes between the interviews were: individual factors, societal factors, interventions, and training. In general, the responses were optimistic about the potential to decrease large-scale violence, but were not certain about whether or not predictive factors existed. The results emphasized the importance of further exploration into predictive factors and training techniques.

Unmasking the Villain: Predictive Factors for Potential Mass Shooters

Gun violence is not a new issue in the U.S., neither are mass shootings. What is becoming a new issue is the frequency and severity of the crimes, exemplified by the 47-school shootings to-date in 2015. This year there has been more than one mass shooting per day (defined as a violent act committed by gun with four or more victims): 294 shootings in 274 days (Ingraham, 2015). However, according to the FBI's definition, there has been one or more mass shootings **per month** (defined as a violent act where a gun has been used to kill four or more people): an average of 16.4 shootings a year (information for 2014-2015 not included)(Perez, 2014). The difference does not come from varying data, but from numerous criteria on what constitutes a mass shooting.

This paper began in the summer of 2015 in the aftermath of Dylann Roof opening fire in a Charleston church, killing nine and injuring one. During the formation of the literature review, Chris Harper-Mercer opened fire at Umpqua Community College in Oregon, killing 10 people and injuring nine others. The question that arose after each of these events was whether they could have been predicted. The field of social work can play an important part in helping proactively predict (and prevent) mass shootings. People in the field of social work are talking to individuals who need deeper support; they have a broader view, can identify signs and get the individual more help if needed. Social workers are in a position to identify "red flags" that others are missing, and intervene.

The individual scenarios chosen within the literature review included official statements released after the crime, stating that there were in fact, red flags and that opportunities were missed to prevent the crimes from happening. This paper will take

into account what various professionals believe about prediction factors as a way to prevent mass shootings. The purpose is to establish whether professionals believe there is a way to predict large-scale aggressions that are not related to gang affiliation. The desire is that through discussion of the topic, agreement and action will take place.

Our thoughts and prayers are not enough. It's not enough. It does not capture the heartache and grief and anger that we should feel, and it does nothing to prevent this carnage from being inflicted someplace else in America -- next week, or a couple months from now. (President Barack Obama Oct. 1, 2015) (McKirdy & Armstrong, 2015).

Literature Review

Current Impact in America

James Holmes, Adam Lanza, Dylann Roof, Jared Laughner; these names are the newest form of celebrity in the United States, and they are taking the nation by storm (Ford, 2015). Today's youth actively use technology in their social circle, creating what Ron Taffel (2005) calls a "second family" (p21). Reviewing the internet and writings of today's youth, as well as conversations with individuals involved in mass shootings, make evident the warnings towards the propensity for violence (Luepker, 2012). Celebrities are becoming more important in the lives of adolescents, to the point where they know more names of people on TMZ than they do of the founding fathers (Taffel, 2005). The young men who are committing these atrocities are receiving attention from the press, elevating their social status to that of celebrities; James Holmes said that he was going to commit his crime in order to become "famous" (AP, 2015). "We are a

people who can watch a young man... spiral into murderous rampage without choosing to intervene before it is too late" (Ball, 2012). Intervention, rather than reaction.

The individuals mentioned earlier -- James Holmes, Adam Lanza, Dylann Roof and Jared Laughner, as well as Jaylen Fryberg, Eric Harris and Dylan Klebold -- were responsible for 74 deaths and 99 injured; that's 173 victims by seven youth between the ages of 15-24 years of age (Follman, Aronsen & Pan, 2015). With the exception of Jaylen Fryberg, who clearly identified his intended victims and means, the other individuals had not named specific enough targets prior to the shootings, and therefore could not be detained when concerns arose about their potential actions (2015).

[Adolescents] who commit public violence or wild acting-out have found a metaphor that describes the pain of, as well as the solution, for their invisibility. They engage in such behavior precisely because it makes an unknown [youth] uniquely recognizable. In a vulnerable [youth's] mind, violence or outrageous behavior appears to be the perfect antidote to the anonymity of his or her life" (Taffel, 2005, p.20, bracketed terms and "child" are interchangeable within the text).

Individual scenarios. Jaylen Fryberg was a 15-year-old high school student who was just voted homecoming king. He was a normal teenager according to those in his community, until the day he shot five people, killing four. One week prior to the crime, Fryberg and his girlfriend of more than a year broke up. After the breakup, he began talking with his friends about guns and setting up his funeral. He told his ex-girlfriend that he had set a date for what he was going to do. He also sent out text messages with images of him holding a gun and making remarks such as "bang, bang, I'm dead". The

text messages began to increase rapidly and started including apologies to the parents of his intended victims. Fryberg was texting his friends and family up until the shooting, making numerous attempts to speak with his ex-girlfriend about suicidal ideations. The people closest to him dismissed what he was saying, until they turned on the news (Hefley & Stevick, 2015).

Jared Laughner shot and killed six people and injured 13 others, including former congresswoman Gabrielle Giffords in January of 2011. He bought 93 rounds of ammunition with the intent of killing the congresswoman; he was only able to fire 33 before he was subdued. Laughner had a history of "failures" from the people who were supposed to support him in his life (Ball, 2012). His parents were concerned about his mental state in the months leading up to the shooting; they took his gun from him, disabled his vehicle at night, and even spoke with school security. They suggested that he seek mental help for his disturbing behaviors. The day of the shooting, he was having difficulty regulating his moods and ran from his parents when confronted about what he was carrying in his bag (Martinez & Carter, 2013). Laughner was diagnosed as schizophrenic following the attack at the "meet and greet" (Ball, 2012).

In 2012, James Holmes shot a crowd of people who were attending the premiere of the "Dark Knight". In one of the worst mass shootings in the United States, Holmes killed 12 people and injured 58 others. One month prior to the shooting, the psychiatrist working with Holmes told campus police that she was concerned about threats that he had made to kill people because of his failure in science courses. Holmes decided to drop out of school when his homicidal urges became too much to handle. Shortly after making this decision, he went to his psychiatrist in a very agitated state; he did not feel he could

make an impact in the field of science so he was going to “blow up people” to become famous (AP, 2015). When Holmes’ left the office, the severity of his agitation led the psychiatrist to break confidentiality and call Holmes’ mother.

Also in 2012, Adam Lanza, a 20 year old male, killed his mother and then killed 20 first graders and six teachers at an elementary school. Years earlier, one of Lanza’s high school teachers had reported him to the principal because he had written graphic stories about extreme violence to children (McShane, 2013). He had a history of distancing himself from people and was diagnosed with Asperger’s syndrome (Miller & Perrefort, 2013). Lanza’s verbal and written communications expressed his interest in weapons as well as his dislike of anything out of his routine (Miller & Perrefort, 2013). He was described as someone who did not feel physical pain, and had very little emotional affect. There also was concern about his mother’s mental stability; she owned multiple guns and photographed Lanza as a toddler holding a gun in his mouth (McShane, 2013). According to FBI behavioral analyst Mary Ellen O’Toole, the warning signs for a school shooting were there (Miller & Perrefort, 2013).

One of the more recent mass shootings is that of Dylann Storm Roof, who shot and killed nine adults and injured three who were attending a Bible study in a Charleston church. Roof is a 21 year old male with a hatred for African Americans and a verbal desire to start a civil war. Roof exhibited signs of aggression from a young age. He had been transferred numerous times among schools because of inappropriate behavior and has no record of an education past 9th grade. He bought a gun with money that had been gifted to him by family, and he knew his targeted church was a ‘black’ church (Robles, Horowitz & Dewan, 2015). Roof claimed that he was going to shoot “black people”, he

had a gun around the same time that he began to speak more racially, and he decided to sleep in his car after he purchased the gun. Clearly, there were missed opportunities for intervention (2015).

Each of the aforementioned young men exhibited signs that, after the fact, professionals declared were “clear warnings” of violence and premeditation (Hefley & Stevick, 2015; AP, 2015; McShane, 2013; Robles, Horowitz & Dewan, 2015; Miller & Perrefort, 2013). However, prior to the crimes, there was little -- or nothing -- done to prevent or detain these individuals. Each of the crimes was described as being “preventable” had there been more understanding as to what indicators could potentially lead to this level of aggression. Mary Ellen O’Toole (2008), in her report titled “The School Shooter: The Threat Assessment Perspective” stated:

Training is also needed to educate and sensitize students about "leakage" and its significance in dealing with the threat of violence. Students are often in the best position to see and hear signs or cues of potential violence, and training should stress that ignoring those cues or remaining silent can be dangerous for themselves as well as others. Training should also confront the common teenage "code of silence" and students' reluctance to be branded as a "snitch" or to violate a friend's confidence (p. 32).

Progression of Prediction

The history of the prediction of violence, and the stigma associated with the belief in a connection between mental illness and violence, have developed in a parallel path. In 1968 the DSMII added the symptoms of aggression and hostility to the diagnosis

of schizophrenia (Macleish & Metzl, 2015). There is a bias to stereotype rather than to consider empirical data; "black versus white" and "mentally ill versus not" are both predominantly decided based upon stereotypes (2015). However, of the numerous factors that have been discovered, none of the prime indicators for mass shootings is mental illness (Loeber, Pardini, Homish, Wei, Crawford, Farrington, et. al, 2005; Hughes, 1996; O'Toole, 2008). The argument of mental illness as a predictor of violence, and if a standard prediction method can effectively be used to identify potential killers, has been established through a series of judicial rulings based upon various concerns and events.

Beginning in the 1950's the judicial system began passing laws granting powers to officials regarding the right to bail and to own guns. One of the studies most researchers consider the beginning of the path to bail and judicial reform is the Philadelphia Bail study conducted by Caleb Foote in 1954 (Goldkamp & Vîlcică, 2009). The study touched on the subject of offenders returning for bail hearings and determined that individuals with less serious crimes are less likely to appear for their hearings than those with more serious offenses (Baradaran & McIntyre, 2012). During the 1960's, the belief that a person must be in "sound mind" in order to own a gun began gaining a strong following (Macleish & Metzl, 2015). The Bail Reform Act of 1966 ruled that all judges could consider the perpetrator's past record in order to decide the bail amount needed for release (Baradaran & McIntyre, 2012). In 1970, the DC Crime Bill made it legal to detain people without bail if the judge believed that the individual was a danger to society (2012).

A major turning point in the realm of violence prediction was in 1974. At the University of California, a man told his therapist that he was going to kill his alleged

girlfriend. In response to this threat, the therapist notified campus police of what was said in the therapy session, suggested that the individual be monitored and possibly detained, and left the matter in their hands. The individual, Prosenjit Poddar, was not detained, and continued stalking the woman, Tatiana Tarasoff. Poddar stabbed Tarasoff to death in the same manner he described to the therapist. The family of the victim sued the therapist for a failure to notify the intended victim or her family, leading to her death. The lawsuit ended in what is known as the “duty to warn” (Luepker, 2012). The Duty to Warn law was enacted in California initially and spread across other states rapidly (Widgery & Winterfield, 2013). The Duty to Warn and Protect Act was finalized in 1976 and was done so with the belief that the therapist-client “protective privilege ends where the public peril begins” (Luepker, 2012, p.78).

Shift to Mental Illness

The 1980’s marked an increase in what was considered to be relevant to predicting crimes. In the 1984 Federal Bail Reform Act, judges were permitted to act on behalf of the people and deny bail if they felt they were protecting the public from danger. Danger was determined on the present crime, how the individual behaved in the past, and what the judge believed the individual’s character to be. This final criteria is where the prediction traits are implemented. The factors included in prediction were: family situation, working status, socio-economic-status, the reputation of the individual, whether they were believed to be a flight risk, and their community ties (Baradaran & McIntyre, 2012).

Throughout the 1980’s and into the 1990’s, a better picture of the contributing factors in relation to risk of violence began to emerge. The homicide rate in the 1980’s

and 1990's was rising rapidly (Loebur); in 1996, homicide was the 11th leading cause of death in the United States (Hughes, 1996). In 1999, Breggin stated that mental illness plus guns plus psychotropic drugs lead to large-scale aggression; an example of this is Eric Harris, one of two teenagers who attacked Columbine High School (Macleish & Metzl, 2015). Another study published in 1996 found that a 72-hour psychiatric hold is important because 65 % of the time, clinicians can predict violence within two to three days of a client being committed through emergency services (Hughes, 1996).

In 2012, it was stated "about half of...mass killings are being done by people with severe mental illness, mostly schizophrenia, and if they were being treated the killings would have been preventable" (Macleish & Metzl, 2015). This statement leads to concerns with the increase in mass murders committed by individuals that are being associated with mental illness. The fact is, less than 3-5% of crimes in the United States are committed by people with mental illness (2015). Conservative commentator Anne Coulter is quoted saying that "gun's don't kill people, the mentally ill do;" NRA president Wayne Lapierre called the shooters "delusional killers" and said that there should be a "national registry" of the mentally ill. New York Governor Cuomo suggested that "people who have mental issues should not have guns" (p. 240). Mental illness has taken over as "the factor" for predicting violence -- other factors are no longer a focus.

Creation of Factors

The Pittsburgh Youth Study (PYS) (2005), was a groundbreaking study that concluded violence can be predicted within a specific population of young boys; this finding is contrary to other studies. The sample population included boys from three inner city schools who were tracked from childhood to adulthood with the purpose of

identifying possible predicting factors of violence. The results were separated into violence done by those who were previously violent and violence done by those who were not. The screening process began by assigning the youth a risk score based upon their history, behaviors, family, socio-economic status, education level, etc. and then selecting youth with scores greater than 30% and an equal number of youth from the rest of the population. The study ended with a list of 11 factors that could be used to assess the risk of violence: low socio-economic-status, high parent stress, family on welfare or state assistance, delinquency before the age of 10, a parental report of a bad neighborhood, physical cruelty to people, truancy, a depressed mood and affect, low motivation in school, physical aggression, and callous or unemotional behaviors (Loeber, Pardini, Homish, Wei, Crawford, Farrington, et. al, 2005).

Biology. Dr. Jim Fallon, a researcher in California, approaches the concept of prediction from a biological standpoint. His research has resulted in the identification of a gene that many are calling "the violence gene". In a Ted Talks session (2012) he explained how the MAOA gene on the X-chromosome desensitizes the brain to the neurotransmitter serotonin. Prior to puberty, if the individual has experienced a severe trauma, their brain becomes predisposed to the need of higher levels of both dopamine and serotonin; individuals with this gene need an explicitly high amount of serotonin to experience the effects of this neurotransmitter (Fallon, 2013). Serotonin is believed to affect the individual's ability to regulate their mood; this is especially important when considering the individual's predisposition to aggression based upon the presence of the MAOA gene, with various negative environmental factors occurring simultaneously (Medical News Today, 2015).

An extremely large percentage of mass killers are males, 90% (Ford, 2015). According to Jim Fallon (Fallon, 2013), this is because the MAOA gene is passed on through the X-chromosome. Males receive one X-chromosome from their mother and one Y-chromosome from their father. Females on the other hand receive two X-chromosomes so if one chromosome has the MAOA gene, the other one can work as a sort of balance towards leveling the effects of the gene (Fallon, 2013). Another primary effect of the MAOA gene is the deterioration of the prefrontal cortex. The prefrontal cortex is responsible for cognitive processing and decision-making; therefore, the deterioration of this part of the brain can cause individuals to not see fully the effects of their violent actions. Injuries to the prefrontal cortex can result in "friendless and emotionless" adolescents -- adults can have difficulty identifying when people are cheerful or sad. "Once the damage is done to the prefrontal tissue, no other part of the brain can assume its functions" (summary Stein, 2007).

The necessity for developing identifiable and generalizable factors for predicting violence and aggression is important because the misconception that mental health professionals are fortune tellers lead many to place the blame of the murders upon the psychologist or psychiatrist who was attending to the murderer. The cases of James Holmes and Prosenjit Poddar are two examples of this (Luepker, 2012). On the contrary, the American Psychological Association published a statement regarding prediction:

Psychiatrists have no special knowledge or ability with which to predict dangerous behaviors. Studies have shown that even with patients in whom there is a history of violent acts, predictions of future violence will be wrong for two out of every three patients. (DSM IV, 1994, p.418).

The Evolution of Predicting Factors

A number of avenues have been developed through the numerous studies regarding violence factors and prediction methods. One of the strongest gains has been the development of a high level of attention to the fact that there are points of possible intervention prior to the aggression. Despite this evidence, the majority of identification appears to be retroactive rather than proactive (Miller & Perrefort, 2013). The purpose of identifying factors of violence and aggression is not to label youth as aggressive but to help individuals working with youth create a baseline of information for identifying areas of need individualized to the client (Hefley & Stevick, 2015).

The results of the various studies do not yield conclusive lists of factors, nor do the majority of them create statistically significant results (Calley, 2012; Macleish & Metzl, 2015; Baradaran & McIntyre, 2012; Chandler, Levitt, & List, 2011). One study, the Pittsburgh Youth Study, did find statistically significant results for factors that make "it possible to predict violence in a common sample of boys" (Loeber, Pardini, Homish, Wei, Crawford, Farrington, et. al, 2005, p.1087). As mentioned previously, this study focused on inner city boys from three different schools in Pittsburgh, PA. It began by screening youth for antisocial behaviors. This first step created a propensity for the results to lean toward the criteria for antisocial behavior, including failure to adhere to social norms, deceitfulness, aggressiveness, recklessness, disregard for safety of others, lack of remorse and impulsivity (DSM V, 2013). These diagnostic criteria are identifiable factors in themselves (Chandler, Levitt, & List, 2011). Initially, and during selection, the boys were scored based on 63 risk factors; the results of the study were that 11 factors

were statistically significant determinants to youth violence (Loeber, Pardini, Homish, Wei, Crawford, Farrington, et. al, 2005).

This research raises questions as to its generalizability because it was conducted with individuals who demonstrated a history of aggression, including 33 youth who had committed homicide (Loeber, Pardini, Homish, Wei, Crawford, Farrington, et. al, 2005). Additionally, the criteria for antisocial behavior and conduct disorder were used as criteria for both the selection of participants as well as a foundation for determining deciding factors toward prediction; rather than taking a proactive view, this looks at the identification process from a retroactive perspective.

Modern Factors

Through a variety of studies, factors selected continue to vary according to the specific intent of each study as well as the methods used to collect and process the data. One study concluded that there were no factors to determine violence with youth (O'Toole, 2008). "An adolescent comes to school with a collective life experience...shaped by ...family, school, peers, community, and culture. [From those experiences] come values, prejudices, biases, emotions, and the student's responses to training, stress, and authority...No one factor is decisive" (2008, p.4). O'Toole also says that although there is no true factor to identify violence, there are also no factors that have zero effect on the possibility of violence.

Jonathan Metzl and Keneth Mcleish (2015), discussed the dominant factor in the propensity for violence as being mental illness. History has shown this path of thought to be common within the United States. Many studies about recidivism rates among

reoffenders have not proven to be statistically significant when using the factors of: nature of the crime, evidence of the crime, family relationships, employment status, economic standing, personal character, mental health, past behaviors, community stability, criminal record, and physical appearance (Baradaran & McIntyre, 2012; Calley, 2012). However, according to the Federal Bail Reform Act, dangerousness could be legally determined by current crime, past conduct, family life, employment, reputation, community standing, and ability to flee (Calley, 2012).

Assessment Tools

Introduction of the Four-Prong Model. The Four-Pronged Assessment Approach developed by Mary Ellen O'Toole (2008) takes an ecological approach and considers each aspect of the youth's life rather than just the mental health of the individual person. The model was developed for use in schools and created with a language easily taught and understood by administrators of the assessment. The first prong looks at the components of the individual, their personality traits and behaviors. The second prong is the family. What are the family dynamics, what are the factors stemming from the home life? The third prong is the school; what is happening as far as the school dynamics go. The way a child feels at school can greatly impact the way they view the world, because through school they learn how things are likely to be in the future from a social and academic perspective. Prong four is the social dynamics; how is the youth interacting with friends, what are the relationships, who is in this "second family" (O'Toole, 2008). The multi-dimensional approach keeps the assessment individualized and more of a guide rather than a "cookie-cutter" label for every youth with similar situations.

Standardized Assessments. The advantage of identifying factors in a standardized and evidence-based manner is that it creates a shared language and ideally a common understanding of the factors. One standardized assessment tool is the Adverse Childhood Experience (ACE) survey, using “yes or no” questions; this survey gives the individual a score identifying the level of negative or traumatic experiences in their life (Ismailji, 2012). The ACE survey is currently being used throughout a wide range of settings. It is used to help identify which individuals are at a higher risk for committing a crime as they get older (Reavis, 2012). This survey consists of identifying questions about physical abuse, sexual abuse, parent drinking/drugs, neglect, and exposure to household violence (Duke, Pettingell, McMorris, & Borowsky, 2010). The overall goal of the survey is to provide information focusing on the impact that trauma at a young age can have upon the individual as they get older (Ismailji, 2012).

The Conflicts Tactics Scale (CTS) is an assessment that can be used with older individuals. The CTS is the name of two more specific assessments: CTS2 and CTSPC. Each of the assessments measures the psychological and or physical abuse of either themselves or their partner/child (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, et. al, 1998). The two assessments are divided by their intended population; the CTS2 measures partner violence within a relationship and the CTSPC measures the maltreatment of a child by his or her parent (Straus, 2007). One of the limitations to this survey is that it only pertains to what is happening in the moment and does not include past occurrences or any indication of future behaviors.

A newer assessment method that takes both history and present factors into account is the Historical, Clinical and Risk Management Assessment (HCR-20 V3), now

in its third version. This assessment tool looks at 20 different factors separated into the categories that could also be labeled as "history of problems", "recent problems", and "future problems" (Logan, 2014). In the historical section the factors are: violence, other antisocial behavior, relationships, employment, substance use, major mental disorder, personality disorder, traumatic experiences, violent attitudes, treatment or supervision response, and other historical factors. The next section is the clinical factors: insight, violent ideation or intent, symptoms of major mental disorder, instability, treatment or supervision response, and other clinical risk factors. The third section revolves around risk management factors: professional services or plans, living situation, personal support, treatment or supervision response, stress or coping, and other risk management factors (2014). This assessment method is intended for use by psychologists, psychiatrists, nurses, social workers, occupational therapists, rehabilitation therapists, corrections officers, police, human resources, and security (<http://hcr-20.com>).

The Violence Risk Appraisal Guide (VRAG) is a type of assessment intended for a very specific population. Created in Canada, the VRAG looks at various factors that could contribute to the likelihood of people with mental illness reoffending. This guide is based on 12 factors specific to the intended population. The factors for this assessment are: whether they lived with both biological parents until the age of 16, their behavior in elementary school, alcohol use history, marital status, criminal history for non-violent crimes, failure on prior release, age of offense, whether there was injury to the victim, whether the victim was a female, if they meet the requirements for a personality disorder or schizophrenia (DSM-III criteria), and the score of the psychopathy checklist (Kroner,

2007). Because this tool is so specific, there is no ability to generalize among the general public.

Research Questions

Acknowledging contributing factors other than mental illness as identifiers within threat assessment in various studies and assessments opens discussion on their accuracy. It is important to take into consideration the ever-changing culture of today's youth and how that impacts their development and perception of the world. What was once considered abnormal behavior for youth is now accepted and even expected in some cases. The factors that once went into labeling youth as having a high risk of violence are becoming the norm among high school students, and therefore must continue to be modified and developed in an effort to keep them effective. However, are current prediction methods and factors helping to identify potential youth mass murderers? This is the question that is important to ask today's professionals, and is the question that will be pursued through this study.

Conceptual Framework

A Shock to the System

On December 14, 2012, the world was shown a very grim reality that no population was safe or exempt from the threat of a random killing. On this day, 20 first graders were shot and killed in their classroom by a young man who, by initial appearance, acted without motivation. This crime placed a new emphasis on the problem of youth committing atrocities, and highlighted the fact that there is no specific population more at risk than others of becoming victims. It also reminded the nation that criminals are not limited to the stereotypes about specific races or classes of people

committing crimes. Looking back on this date and this devastating moment elicits pain, but also ignites the desire to determine if there are predicting factors that could help to alleviate or at least decrease the likelihood of it happening again.

Theoretical Contributions

Much of the more recent research regarding the topic of predicated factors for aggression shows questions about history and familial structure. Social learning theories attest to the concept that a person learns from their environment and figures how to apply that to the general world. In Adam Lanza's case, he was raised in a home with multiple guns and a mother with mental illness. Lanza's perception of the world was through a lens where guns were the first place to turn when he felt excited, happy, sad, or angry; it almost makes sense that when he reached his threshold for negative factors in his life he resorted to gun violence. He reacted in a way that his family would have done, he just did so on a larger scale.

The idea that children learn from their parents is not new; what is new is the idea that despite a person's upbringing, proper intervention can influence the actions they take later in life. In the education system, children are taught how to pass exams rather than educated about the world or social skills. From the constructionist perspective, we are creating youth without the tools they need to effectively navigate the world, and yet we expect them to make rational and morally ethical decisions when they experience an intense emotion. Jaylen Fryberg killed four people because he did not know how to handle the strong grief he was feeling over the loss of his relationship with his ex-girlfriend. Could this have been avoided if he had been taught emotional regulation and coping skills?

Research Method

Research Design

The data gathered through this project was done in a qualitative fashion through semi-structured interviews and information from previous research regarding current prediction methods and their impact on identifying potential youth mass murderers. Interview questions inquired about information regarding the opinions of the interviewee on potential solutions and improvements as well as where they see their field will be changing in the future. This research took into account what various professionals believe about predictive factors as a way to prevent mass shootings that are not a result of gang affiliation. The purpose was to establish whether professionals believe there is a way to predict large scale aggression of this form. Information was collected through a series of six interviews with professionals in educational and judicial fields; the goal was to collect a balanced number of responses and perspectives that differ yet share the importance of identifying at-risk youth with indicators toward violence.

Sample

The sample includes three- to four professionals from various educational and juvenile justice fields. A professional was defined as holding a degree in one of their prospective fields and having no less than five years' experience practicing their profession. Each professional has a substantial amount of interaction with individuals between the ages of 15 and 24. 'Substantial interaction' is defined as more than two years with direct service contact cumulatively throughout their tenure within their individual fields. Professionals to be included but not limited to: social workers, probation officers, youth case managers, middle school and high school counselors, juvenile lawyers and

judges, therapists specializing in adolescents, and other professionals to be defined, in the event they are interviewed, during the discussion section. The demographics of the participants was limited to the Twin Cities.

Participants were selected through referrals from other professionals who have been informed of the concept and direction of the intended study. The primary method will be a convenience sample. There was an initial email to the sample, explaining, in more detail, the purpose of the interview and how their responses will be used (See Appendix C).

Protection of Human Subjects

An informed consent form was delivered to the participants via email along with the interview questions. An explanation that the professionals will be speaking to their own opinions of the questions provided rather than their profession as a whole was also disclosed to each participant. The directions in the email requested that the document not be signed until the start of the interview so that any questions can be answered and the consent will therefore be accurately informed. The form was modified by the researcher and then reviewed by the clinical research supervisor a number of times prior to a final copy being approved for presentation. The consent form discusses the purpose of the study, how the participants will be selected, the procedures involved regarding the consent form and questions, how the materials would be used, security precautions in place, and contact information if any questions arose (See Appendix A).

Further protection of the human subjects will be done through constructing interview questions in a way that tries to keep away from the topic of personal experience

or intimate situations. In the event there appears to be discomfort, the interview will be stopped and there will be a check-in with the interviewee. The questions were approved by Dr. Lisa Kiesel to ensure compliance with the Internal Review Board and the Code of Ethics Protection of Human Subjects guidelines.

Anonymity was ensured through de-identifying any information provided during interviews. The consent forms have names and signatures on them and are contained in a locked box with the audio recording and transcripts. There was no third party transcriber in an effort to limit the number of people with privilege to the identifiable information. Identifiable information includes, but is not limited to, place of employment and residence, membership information, location of the interview, birthdate, email address, phone number, and dates of specific incidents or cases.

Data Collection Instrument and Process

The interviews were conducted in private environments selected by the participants in order to increase their likelihood of comfort during the interview. There were six professionals from the juvenile justice and education systems as defined within the sample section. The interview consisted of 10 questions with sub questions designed to redirect the interview as needed (See Appendix B). The responses were then transcribed and coded for themes, which was then compared and contrasted with previous research.

Data Analysis Plan

Themes found to be common throughout many of the interviews was considered part of the primary results of the research and compared with previously created research

and studies across the nation. The questions in the semi-structured interview were open-ended with the anticipation of more narrative responses. Therefore, the questions were ordered by level of importance, beginning with those that are more pertinent and relevant to the research and ending with those that are provided supportive and gain extra information about the initial questions.

Findings

Through the course of analysis, common themes and codes arose. Key points and concepts from each interview were organized into various codes that were then grouped according to common themes. Initially nine themes arose. After removing multiples and combining similar codes, the themes were condensed into four: individual factors, societal factors, interventions, and training. Within each major theme are subthemes that were shared with some but not all of the interviews. The subthemes and their importance will be discussed within each themes section.

Individual Factors

Participants were asked if they believed there were any factors that might be used for predicting aggression and violence. Individual factors are defined as factors affecting a person on a personal level. These factors vary as to whether they are internal or external, observable or not.

I think there are so many different factors that can cause aggression and can cause violence; some can be truly genetic in nature and some can be environmental [such as] how people have been conditioned environmentally. Sometimes it's how

you've grown up in the community that you're in [where] violence is more accepted as a way to solve situations, conflicts, etc.

The three subthemes that arose are isolation, mental illness, and past history. These themes presented an interesting finding because they remained similar between all interviewees (100%) regardless of employment or education level.

Isolation. When describing isolation, multiple terms were used: withdrawal, social isolation, and difficulty making friends. "I think looking for anything that might put the child on the edges: inability to function with their peer group, poor socialization, poor attendance" these are noted as being key identifiers to people who might be of higher risk for aggression than those that easily make and keep relationships.

When you have youth that come in and are voicetrous, they always have something to say and are always participating, and it's usually not all of a sudden, but you start thinking back onto how they were when they came in and how they are now and its 180 degree difference, that might be worth some inquiry to see what the difference is.

Mental Illness. Mental illness was one of the more broadly defined terms used throughout the data collection process and presented by all of the participants (100%). The mental illness themes included talk of mental health as a positive, mental diagnosis and illness, mental wellbeing as a whole person, and mental illness as defined by the media. Mental illness was viewed from both a positive and a negative light during the interviews and described as being either a disability and a hindrance or an asset.

Mental health is everything you do, your mental health and physical health go hand-in-hand; trauma is part of your mental health so you know everything there are obviously environmental factors that can contribute to our mental health but there's also within each of us resiliency.

Personal History. This theme is also widely inclusive of a number of smaller subgroups. Personal history encompasses: trauma, neglect, domestic violence, exposure to drugs/alcohol/violence, personal aggression, criminal history. The primary codes within this subgroup are exposure to violence inside or outside the home, and exposure or use of drugs and alcohol. "It's not that their parents don't want good things for [the youth], but they don't have a lot of example...there's not that hopefulness for them or that sense that they have a path in a life with opportunities."

Other Individual Factors.

Outside of the aforementioned three subgroups, other factors stood out. Socioeconomic status appeared in half (50%) of the interviews; in each case, aggression was described as having a positive correlation with poverty. "Money is an issue. Money makes the world go around." Exposure to guns was discussed in half (50%) of the interviews as a precursor to aggression and violence. One side point to mention that was of some interest is that in one interview (16.6%), the likelihood of large scale aggression was believed to be higher if the individual had no history of physical violence/aggression rather than if they had previously exhibited physical aggression.

I don't think many of the kids we see do larger scale aggressive or violent acts have a significant history of real predictable frequent aggression, that those kids

tend to use their bodies more whereas these larger attacks tend to be kids using weapons.

Another interview (16.6%) brought up the concept of masculinity from both the personal and societal level and the role that might play in aggression and violence.

Mental illness, how easy it is to have access to guns, those are probably two things that are represented in the media. I think other things that are less represented are ideas about masculinity. Really just masculinity and really how men are socialized to how we link masculinity and violence in this culture particularly when men feel entitled to things they feel that they deserve things and they don't get it they demonstrate their power through violence

Societal Factors

While participants were responding to the questions about factors contributing to violence and aggression, some of their responses fell away from the individual and went more toward society. Societal factors were defined as being anything that related to something within the society outside of the home or missing all together.

You need more people, you need more therapy, you need more services, more, more, more, you need more shelters. A lot of the people that have issues aren't going into places because they have nothing to do, there is something else going on.

The dominant subtheme within this category is services and supports. Services and supports includes: community services, support programs, employment opportunities, school aged programs, and access to services. Much of what was discussed about societal

factors was that the changes are happening in a negative way, “I’ve watched...programs just disappearing, it was like watching the field of flowers wilt and die in the community.” When the programs stayed, the quality of service provided depended on the income bracket served, “the programs we tend to offer our kids are paid at the lowest level so we have the hardest/toughest families, toughest in the sense of having a myriad of issues, we give them bargain-basement services.”

A subgrouping of codes showed that a second subgroup of societal violence is was also common between the interviewees. Societal violence is referred to as violence within communities that create a culture of violence where violence is glamorized and normal.

[The youth] learned violence at home, they watch it, they learn it, it's an atmosphere that's harsh. Or, they're in a community where violence is prevalent, they kind of learn, its more normalized. Not to say that they like it or should like it but, whereas if you're not in an environment where there's a lot of violence around you may not, doesn't mean you couldn't, become violent but you're less likely to choose that as a behavior alternative.

Intervention-Prevention

The intervention theme, the “immunization against acting out violently”, was derived from a combination of tasks that could be done prior to aggression/ violence occurring and tasks or actions that could be done after an event occurs but before a second event happens. These responses originated from a question regarding the existence and application of interventions or other prevention techniques.

There isn't much we can do about the past, we can't change the past...don't let this scare you...this is [the] past and we can work with that....It is hard to intervene before the damage that sets the child up is done.

The concept of interventions was both hopeful as well as uncertain. The primary subgroup within this theme was interventions involving school. Regarding the teacher's responsibility came paying attention to the students, providing positive reinforcement, and watching for warning signs and then investigating them when they are noticed. The curricula was also targeted as a point of intervention: add social skills education, teach coping strategies and social emotional regulation, increase scope of the antibullying campaign, and provide special education.

If we're bringing up a generation of kids that's taught to be kind to each other and taught to look out for each other, that's a big thing. I think those are the preventative things that could be happening. We socialize kids differently in that we give kids the opportunities to be successful in school.

Suggested school interventions also mention the importance of providing enough counselors, teachers, and support staff and having after school activities.

Outlier codes included: changing how masculinity is taught, legal intervention such as CPS and probation officers, family involvement, and access to services/resources.

I think if we could early on get kids screened and diagnosed...but get them screened for risk factors, get them some supportive and protective services going so they have enrichments and things like that, you know you could do so much

more for these kids and their families and even if we couldn't automatically change everything about their family or their community, we could inoculate them against the problems that they are going to end up having.

Training

“Training the teachers in those early warning signs, understanding what trauma is and recognizing symptoms also teaching them interventions so they are not unintentionally triggering trauma.” The importance of training was not missed by any of the participants.

You can train, there are different kinds of training...From a social work standpoint, it is prevention rather than reaction; what can we do before this boils over, what can we put together to see if we can pick up on the signs before it happens. Law enforcement is more of a reaction, everything has hit the fan, the crisis is here how are we going to control this crisis before it spreads any deeper...Then you have a third element like [a group foster home] where they fall in the middle of reaction and prevention; I think more-so their goal is to suppress kids, keep everybody where they are.

“If the teachers have the training but the next level doesn't know what to do with that information or how to respond to it then teachers are going to go back to not noticing it because why bring it up if no one's going to do anything about it.” There was not a consensus on whether there is or is not training and if there is, whether or not it is adequate. “Honestly we don't get training on some of these preventative or intervention

things...we are up to our own imaginations about what should be a warning sign. I don't feel prepared in that regard."

Perfect World

Each of the participants was asked a question about what they viewed as the perfect world in regard to aggression and violence prediction; the responses rang as both hopeful and skeptical.

- In a perfect world every kid would be born into a family that has the emotional and financial capacity to raise them, that can meet their needs, that can understand and give them the best shot. Whatever inherent deficits they may have ... regardless of their appearance, health, or their parents' situation, but there would be stability for them, consistency from what they are learning and developing at home and in their transition to schools. Schools support them and we would have opportunities for kids that don't presume that everybody goes to college. Everybody would have the opportunity to optimize their ability to be self-sufficient and they would feel like they had a purpose in life.
- I think that each teacher would be looking at their classroom and assessing for and looking for a kid they feel is on the margin ... kids that for some reason are struggling. And that we would have enough school counselors available so that those kids could all be assessed and get appropriate intervention, whether that be inside the school or bringing in the parents to figure it out. It would be great if each teacher when doing report cards had some ability to assess for emotional adjustment as well.

- At the policy level it would involve reforming our gun laws so young people and people in general don't have such easy access to it. Another way it would look is, in an ideal world, people not feeling ostracized or stigmatized for having mental illnesses, we would know how to treat them better and I guess that gets to questions of what are the roots of some of the mental illnesses. We would just imagine gender and specifically masculinity in lots of different types and not just one that is so linked with violence and control; that would be look absurd. We wouldn't have all these [violent] images and we wouldn't have all these images in popular culture that we could even imagine. [A world] where one couldn't even have the [violent] fantasy, where something [so aggressive] couldn't even enter into someone's mind as being an option if they are feeling pissed off if they are being bullied or something like that.
- For a kid, they would have support, they would have loving caring parents, they would have excellent mentors outside in the community, they would have positive prosocial friends, a job, plans and aspirations to further their education, and just a lot of support. I think of my own childhood and the fact that even though I grew up in a single parent home with my sister, it was just the three of us, my mom did everything in her power to keep us busy so we weren't just running around unsupervised, running into trouble. I never really had a desire to get into trouble. I think about had I not had that structure, had I not had that support, had I not had all those things that some of the clients that I work with lack, my life could have been different. So, I see those as huge influences, I had a positive role model.

- I think in the ideal world, if there are enough supports, if there is access to resources available, if there is a willingness from a societal perspective to talk about mental health, to be willing to create even legislation to support mental health. I think it really is top-down and a bottom-up. I think it really takes all of us to come together as communities, as groups to really work together to stop violence to prevent violence, to help our kids develop and find the resources within themselves to be resilient and overcome, and the only way to do that is to have everyone come together and do that it is building the capacity starting with our children.
- Money, in my opinion, if we had the money you could afford to create more positive programs, you could afford to hire more staff, more capable staff. You could fix a lot of the poverty stricken areas, you could do a lot more if you had more. We just don't have it and when you don't have it people are more likely to do things people are more likely to do things under those circumstances so if you are hungry. An example a person gave me one time is that if you crash into the side of a mountain and you are on a plane and I die in the crash as soon as the plane hits that mountain, I am dead. Probably on the first day of you being hungry you wouldn't eat me. Probably on day three you are going to eat me. Does that make you a cannibal if you eat me? It wouldn't, because of your circumstances. If you are at home eating cereal, you would eat whatever you could, but because your circumstances are what they are you move from living to survival mode and you need to survive and this is here and I need to do the best that I can with what I have for now to make it through this today and I will deal with tomorrow

tomorrow, but I need to get there right now. Where survival is the same thing in North ____ it is the same thing with the soldiers in Iraq, it is the same thing with politics, you've got your politicians that throw each other under the bus just to make it until tomorrow and you've got your soldiers that are killing people just so they can make it back home you've got your homeless people that are breaking and entering just to find something they can eat. It's all survival at the end of the day and that survival comes from lack of resources and lack of resources comes from no money.

Discussion

Throughout the collection of the data, the responses provided during the interviews matched the recovered information found during the literature review. However, despite initial hypothesis, the responses were not dependent upon the participant's career field or education level. Each of the interviews carried with it a tone of unease and dissatisfaction for where the country is right now concerning today's youth. Differences arose when determining how to identify individuals with higher risk of mass aggression. Each individual field perceived the threat according to the population and the risk with which they currently work. Two participants (33%) believed that prediction is possible and four participants (67%) were under the impression that interventions are more reactive than proactive. None of the participants believed in the prediction of large-scale aggression with the use of a firearm, however, all six participants believed that an increase in access to weapons has something to do with the increase in crimes committed with the use of a weapon.

The opinions of characteristics and qualities with potential as prediction factors on an individual basis contained similarities between all six participants: isolation, mental health, and personal history. While these factors have a potential for determining whether a person is going to commit a large-scale aggression, the combination of these factors does signify that the individual might need a little more focused attention. The purpose of this study was not to decide how to label an individual, but how to look at the likelihood of a crime being committed.

All six of the participants portrayed a hopeful attitude toward what the world could be if certain changes occurred. The belief in whether changes had to be made within the family or within the community was divided with a 2:4 split (33% to 67%). One participant, while hopeful, did describe a disbelief that change was going to happen because of the lack of money.

Implications

Social Work Practice. While this research does not say conclusively that there are specific predictors to large scale aggression, it does raise the question of how to slow down and look at the individual to see whether or not there is cause for concern. The field of social work is one that places focus on the person in their environment which gives people who work in this field a special advantage to being able to identify when there might be influences that are impacting that individual in a way that could potentially lead to aggression. This research shows that the importance of slowing down and paying attention is seen in a variety of different fields that interact with people who are potentially at risk for violence or crime in general.

Research. Research into this topic has a long way to go. There have been smaller scale studies that are for very specific populations, however, there are none that are generalizable between populations or different settings. The difficult thing about this type of research is going to be that human behavior can change depending on a variety of different factors that cannot all be controlled. Another difficult point would be conducting research without the inclusion criteria being conducive to a mental health diagnosis (ie. Sociopathic behaviors); while there tends to be some correlation between aggression and mental illness, beginning the research with diagnostic criteria as inclusion criteria runs the risk of skewing the results.

Policy. Unfortunately, until the research has been done to further identify potential and more specific risk factors for large scale aggression, there cannot be real policy changes. Currently, discussions about mental illness and gun control are being had at frequent intervals as more mass shootings are occurring. However, there is no agreement as to whether mental illness is to blame or gun control. With further research, policy can be made that will decrease violence rather than stigmatizing a group of people.

Strengths and Limitations

Certain steps were taken in order to increase the generalizability and validity of the research. However, this study was created with the understanding that it would not be generalizable across multiple professions or within the entire field of social work based upon the selected sample population. The study is based on responses by professionals from multiple different fields which increases the validity of the various codes and themes. The participants were given copies of the interview questions so responses given would be more about their professional opinion than an emotional and immediate answer.

The interviews were also done according to the interviewee's availability so that they were not rushed.

However, many of the same things that are strengths within this study are also limitations. One limitation is that there is no way to ensure that the responses of the participants are in fact of their own professional opinion rather than those of their place of employment or individual understanding of what they believe the "right" answer is. Generalization might be made possible by expanding the participant group and sample size as well as the criteria for selection. Ensuring the validity of the responses could possibly be increased by collecting the information in a combination of ways such as with a survey and an interview.

Conclusion

There is no question as to the importance of predictive factors for identifying potential mass shooters, however, whether or not there are predictive factors remains undetermined. This research, while making a valiant effort, did not establish tangible and concrete factors for identification. The interviewees did not even have the same opinion on whether prediction was possible. The difference in opinion and responses through this interview are parallel to the differences that were found in the literature review.

Throughout the research regarding predicting violence, there has been a trend of going back and forth from the perspective that the individual is to blame, to the idea that we need to focus on societal changes to make a real impact. Policy changes and laws have been enacted granting power to judges and politicians to decide who is unfit to own weapons or who should or should not be released from prison based on the likelihood of

reoffending. Currently, there are discussions about prohibiting people with mental illness from purchasing guns. The unfortunate part is that while politicians and policy makers are trying to agree on what is to blame, the schools are havn gto teach faculty and staff where to hide and how to react if a gunman comes into their schools.

The impact that this information will have, if determined, will be outstanding. This research project was limited to six people all in one metropolitan area in a state that many believe to be extremely progressive. Did this impact the research? On the news daily, there are stories about mass violence, gun control, mental illness, and terrorism. Did this impact the responses to the interview questions? While the questions were written in a way to limit interviewer bias, how did my physical appearance and subtle reactions to answers influence the direction of the interview? These are concerns that raise the questions of validity and reliability of the research.

Despite the limitations of the research and taking into consideration the responses of each of the interviewed individuals, one thing remains certain, this is an important topic that needs to be looked at more than just in the aftermath of a devastating event. Being able to train those who are working with clients fact to face on when to report what your client or student has said, how to respond if you find out information of importance, and what is important information. Preparing clinicians, teachers, counselors and police officers for the “what if”: what if you see a kid who is isolated, what if you notice that a person has an obsession with weapons, what if you notice that there is bullying going on, what if you find out there is a threat for violence, what if someone comes in to where you work and opens fire, what if people are hurt, what if you have to work with people who were involved, what if?

While identifying factors for individuals who are at risk is important, until research can establish those, work needs to be done for mass prevention. Services for families of all income levels needs to be reinforced so that families can get the help they need. Anti-bullying programs in schools are working toward acceptance within the schools. But how far do these go without training for the people who are supposed to be watching today's youth. The purpose of this research project was to identify whether or not professionals believed there were predictive factors for potential mass shooters; whether or not they exist was not established. It is my hope that research will continue with this task and that eventually mass violence will no longer be a daily story in the news.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed. ed.). Washington, DC
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed. ed.). Washington, DC
- Associated press. (2015, September 2). Psychiatrist, campus police officer knew james holmes wanted to kill. *USA Today*.
- Ball, J. (2012, November 8). Loughner faces victims in being sentenced to life in prison without parole. *Washington Post*
- Baradaran, S., & McIntyre, F. L. (2012). Texas law review. *Predicting Violence*, 90. (3) pp. 497-556.
- Calley, N. G. (2012). Juvenile offender recidivism: An examination of risk factors. *Journal of Child Sexual Abuse*, 21(3), 257-272.
- Chandler, D., Levitt, S. D., & List, J. A. (2011). Predicting and preventing shooting among at risk youth. *The American Economic Review*, 101(3)
- Duke, N. N., Pettingell, S. L., McMorris, B. J., & Borowsky, I. W. (2010). Adolescent violence perpetration: Associations with multiple types of adverse childhood experiences. . *Pediatrics*, (4), 778-786.
- Ellickson, P. L., & McGuigan, K. A. (2000). Early predictors of adolescent violence. *American Journal of Public Health*, 90(4), 566-572.

- Fallon, J. (2013). *The psychopath inside: A neuroscientist's personal journey into the dark side of the brain*. New York, NY: Penguin Group
- Fazel, S., Singh, J. P., & Grann, M. (2012). Use of risk assessment instruments to predict violence and antisocial behavior in 73 samples involving 24,827 people. *British Medical Journal*
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of deaths in adults. *American Journal of Preventative Medicine*, 14(4), 245-258.
- Follman, M., Aronsen, G., & Pan, D. (2015). A guide to mass shootings in america. Retrieved September 5, 2015 from:
<http://www.motherjones.com/politics/2012/07/mass-shootings-map?page=2>
- Ford, D. (2015). *Who commits mass shootings?* Retrieved August 15, 2015, from
<http://www.cnn.com/2015/06/27/us/mass-shootings/index.html>
- Goldkamp, J. S., & Vîlcică, E. R. (2009). Judicial discretion and the unfinished agenda of american bail reform: Lessons from the philadelphia's evidence-based judicial strategy. *Book Series: Studies in Law, Politics and Society*, 47(Special Issue New Perspectives on Crime and Criminal Justice), 115-157.
- Hawkins, D. J., Herrenkohl, T. I., Farrington, D. P., Brewer, D., Catalano, R. F., Harachi, T. W., et al. (2000). *Predictors of youth violence* (Juvenile Justice Bulletin No. NCJ 179065). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

- Hefley, D., & Stevick, E. (2015, September 13). Shooter's texts to girlfriend bore warning signs, experts say. *Herald of Everett, Washington*.
- Hughes M.D, D. H. (1996). Suicide and violence assessment in psychiatry. *General Hospital Psychiatry, 18*(6), 416-421.
- Ingraham, C. (2015, October 1). Shooting in Oregon: So far in 2015, we've had 274 days and 294 mass shootings. *The Washington Post*.
- Ismailji, T. (2012). The adverse childhood experiences (ACEs). *Moving Forward in Challenging Times Conference*, Austin, TX.
- Kroner, C., Stadtland, C., Eidt, M., Nedopil, N. (2007). The validity of the violence risk appraisal guide (VRAG) in predicting criminal recidivism. *Criminal Behaviour and Mental Health. 17*. 89-100.
- Loeber, R., Pardini, D., Homish, D. L., Wei, E. H., Crawford, A. M., Farrington, D. P., et al. (2005). The prediction of violence and homicide in young men. *Journal of Consulting and Clinical Psychiatry, 73*(6), 1074-1088.
- Logan, C. (2014). The HCR-20 Version 3: A case study in risk formulation. *International Journal of Forensic Mental Health. 13* (2). 172-180.
- Luepker, E. T. (2012). *Record keeping in psychotherapy and counseling* (2nd ed.). New York, NY: Taylor & Francis Group.
- Macleish, K., & Metzl, J. (2015). Mental illness, mass shootings, & politics of American firearms. *American Journal of Public Health, 105*(2), 240-250.

Martinez, M., & Carter, C. J. (March 28, 2013). New details: Loughner's parents took gun, disabled car to keep him home. *CNN*, from

<http://www.cnn.com/2013/03/27/justice/arizona-loughner-details/index.html>

McKirdy, E., & Armstrong, P. (October 2, 2015). Are mass shooting preventable? These countries have tried. *CNN*, from <http://www.cnn.com/2015/10/02/world/can-legislation-prevent-mass-shootings/index.html>

Mcschane, L. (2013, December 28). Newtown killer adam lanza wrote takes about 'hide and go die' game, graphic violence: Documents. *New York Daily News*,

Medical News Today. (2015). *What is serotonin? what does it do?* Retrieved September 24, 2015, from <http://www.medicalnewstoday.com/articles/232248.php>

Miller, R., & Perrefort, D. (2013). Report: Mother said adam lanza had 'no feeling'. *Stamford Advocate*, September 20, 2015.

Minor, K. I., Wells, J. B., & Angel, E. (2008). Recidivism among juvenile offenders following release from residential placements: Multivariate predictors and gender differences. *Journal of Offender Rehabilitation*, 46(3/4), 171-188.

O'Toole, M. E. (2008). The school shooter: A threat assessment perspective (Critical Incident Response Group Trans.). Quantico, Virginia: FBI Academy.

Padgett, D. K. (2008). *Qualitative methods in social work research*. 2nd ed. NY: Sage Press.

Perez, E. (September 24, 2014). FBI: Mass shooting incidents occurring more frequently.

CNN, from <http://www.cnn.com/2014/09/24/justice/fbi-shooting-incidents-study/index.html>

Reavis, J. A., Looman, J., Franco, K. A., & Rojas, B. (2012). Adverse

childhood experiences and adult criminality: How long must we live before we possess our own lives?. *The Permanente Journal*, 17(2), 44-48.

Robles, F., Horowitz, J., & Dewan, S. (2015). Dylann roof, suspect in charleston

shooting. flew the flags of white power. *The New York Times*, September 16, 2015.

Speiser, M. (August 26, 2015). We are now averaging more than one mass shooting per

day in 2015. *Business Insider* from <http://www.businessinsider.com/us-averages-one-mass-shooting-per-day-2015-8>

Stein, K. (2007). *The genius engine : Where memory, reason, passion, violence, and creativity intersect in the human brain*. Hoboken, N.J.: John Wiley & Sons.

Straus, M. A. (2007). Conflicts Tactics Scales. *Encyclopedia of Domestic Violence*.

Jackson, NY: Taylor & Francis Group. 190-197.

Taffel, R. (2005). *Breaking through to teens: Psychotherapy for a new adolescence*

(Paperback ed. 2010 ed.). New York, NY: The Guilford Press.

TEDTalks: Jim fallon, exploring the mind of a killer. TED Conferences LLC, Films

Media Group and Films for the Humanities & Sciences (Firm) (Directors).

(2012).[Video/DVD] New York, N.Y: Films Media Group.

Turndorf Ph.D., J. (2012, December 20). Was adam lanza an undiagnosed schizophrenic?

Psychology Today, <https://www.psychologytoday.com/blog/we-can-work-it-out/201212/was-adam-lanza-undiagnosed-schizophrenic>

Widgery, A., & Winterfeld, A. (2013). Mental health professionals' duty to warn.

National Conference of State Legislators, Washington D.C. , 21. (1)

Appendix A

Unmasking the Villain:

Prediction factors and their ability to identify potential mass shooters

INFORMATION AND CONSENT FORM

Introduction:

You are invited to participate in a research study being investigated in Minnesota. This study is being conducted by Ivy Villani, a graduate student at St. Catherine University under the supervision of Dr. Lisa Kiesel, a faculty member in the Department of Social Work. You were selected as a possible participant in this research because of your experience involving youth within either the judicial or educational systems. Please read this form and ask questions before you agree to be in the study.

Background Information:

This study will take into account what various professionals believe about prediction factors as a way to prevent mass shootings that are not a result of gang affiliation. The purpose is to establish whether professionals believe there is a way to predict large scale aggression of this form. Approximately 8 people are expected to participate in this research.

Procedures:

If you decide to participate, you will be asked to participate in an interview involving yourself and the researcher, Ivy Villani. The location of the interview will be in a private location such as a room in a library, an office or meeting room, a private room at either St. Catherine's or St. Thomas universities, etc. Prior to the start of the interview, this form will be discussed and signed. During the interview, you will be asked a series of 8 questions regarding your opinion about the topic. This study will take approximately 60 minutes for one session.

Risks and Benefits of being in the study:

The study has minimal risks. However, there may be some discomfort regarding the topic in general. The questions asked will be aimed toward personal opinion about your professional field and will not be generalized to represent the field as a whole. The question will not ask for anecdotal responses or personal experiences. The interview will be terminated if you ask that it stop due to elicited feelings associated with the interview or if the researcher feels that you are being negatively affected by the line of questioning or topic.

The information collected through this study will be able to help narrow potential factors that might contribute to the likelihood of individuals becoming mass shooters. In the judicial field, education field, and field of social work, the base knowledge associated with possible predicating factors will allow the professional to modify their approach when working with individuals that are showing a high number of factors.

There are no direct benefits to you for participating in this research.

Confidentiality:

Any information obtained in connection with this research study that can be identified with you will be disclosed only with your permission; your contributions and shared opinions will be kept confidential. In any written reports or publications, no one will be identified or identifiable and only group data will be presented.

I will keep the audio recordings and transcripts in a lock box in a personal storage unit in Minneapolis, Minnesota. The recordings will be stored on a physical voice recorder as well as in the OneDrive.com cloud storage for the purpose of transcribing the information. I will be the only person with access to any of the records while I work on this project. The lock box will need a key to open it and the online storage will not be on any device, but stored in a secure, password protected digital storage space. I will finish analyzing the data by May of 2016. I will then destroy all original reports, recordings, transcripts, and identifying information that can be linked back to you by May of 2017.

Voluntary nature of the study:

Participation in this research study is voluntary. Your decision whether or not to participate will not affect your future relations with St. Catherine University in any way. If you decide to participate, you are free to stop at any time without affecting these relationships.

Contacts and questions:

If you have any questions, please feel free to contact me, Ivy Villani, at _____. You may ask questions now, or if you have any additional questions later, the faculty advisor, Lisa Kiesel, _____, will be happy to answer them. If you have other questions or concerns regarding the study and would like to talk to someone other than the researcher, you may also contact Dr. John Schmitt, Chair of the St. Catherine University Institutional Review Board, at (651) 690-7739 or jsschmitt@stkate.edu.

You may keep a copy of this form for your records.

Statement of Consent:

You are making a decision whether or not to participate. Your signature indicates that you have read this information and your questions have been answered. Even after signing this form, please know that you may withdraw from the study.

I consent to participate in the study. I also agree to be audio-taped during my participation.

Signature of Participant

Date

Signature of Researcher

Date

Appendix B

Interview Questions

This interview will consist of a series of questions asking about your personal opinions about the appearance of predicting factors for individuals who could commit a mass shooting rather than crimes committed by individuals with a gang affiliation. The responses given are about your personal opinions and not the opinions of your profession.

1. What could you tell me about your professional career?
 - a. Where did you go to school?
 - b. How did you first become interested in this field?
2. What is your opinion about the concept of violence/ aggression prediction?
3. Do you believe there are factors that contribute to some youth committing large scale violence and if so, what are the factors?
4. Do you think that any of the factors could be changed or influenced by intervention and how might they?
 - a. When would you recommend intervention occur?
5. How do you believe that individuals working in direct service should be trained to identify these factors?
 - a. Would standardized assessment tools provide effective structure and application for determining risk of large scale aggression?
6. How do you believe that identifying basic factors will help to prevent the possibility of youth mass shootings?
 - a. Other than the previous mentioned factors, what are some warning signs to look for when working with at risk individuals?
7. Is there a way to predict mass shootings? What could make a difference?
 - a. Do you believe there are changes being made within your field to try and get ahead of this alarming situation?
8. In your opinion, what would a perfect world be like in regard to violence aggression and prediction?
9. Is there anything you would like to add, that we might have missed?

Appendix C

Email Template

Hello,

I would like to ask for your participation in a study that will take into account what various professionals believe are prediction factors that could act as a way to prevent non-gang affiliated mass shootings. The purpose is to establish whether professionals believe there is a way to predict large scale aggression of this form. The commitment would be one interview lasting no more than 60 minutes, at a private location of your choice. There will be a series of eight questions revolving around the topic of predicating factors for large scale violence not related to gang violence. The questions will be about your opinion and not the belief of an entire profession and every effort will be made to ensure confidentiality.

The ideal participant will have a substantial amount of interaction with individuals between the ages of 15 to 27. Substantial experience is defined as more than two years cumulatively throughout their tenure within their individual fields.

I look forward to speaking with you about your participation in this research project.

Ivy Villani